

# OWNER'S GUIDE

10 CENTS

**Model No. 121-940**

## SELF - PROPELLED ROTARY MOWER

### WARRANTY

For one year from date of purchase, MTD Products Inc., will replace for the original purchaser, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser. This warranty does not include replacement of parts which become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons. This warranty does not include the engine, motor, battery, battery charger or any component parts thereof. For service on these units refer to the applicable manufacturer's warranty.

The above warranty will apply only to the original owner and will be effective only if the warranty card has been properly processed. It will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. UNDER NO CIRCUMSTANCES WILL THE RETURN OF A COMPLETE UNIT BE ACCEPTED BY THE FACTORY UNLESS PRIOR WRITTEN PERMISSION HAS BEEN EXTENDED.

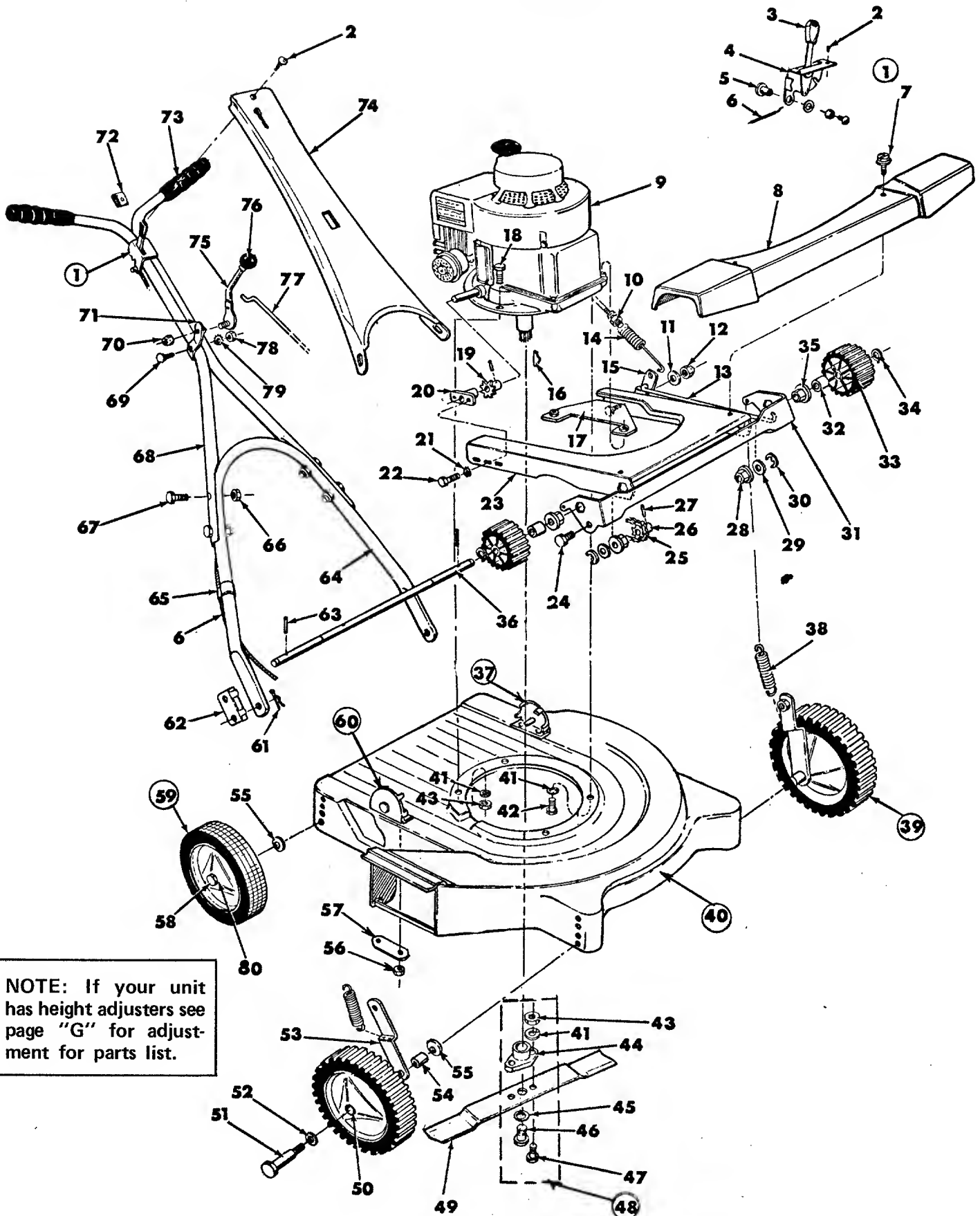
### SAFETY RULES

Your rotary mower is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

1. Remove all sticks, stones, wire and other hazardous items from lawn before mowing. Such items are dangerous to both the mower and individuals in the vicinity of the mower.
2. Always disconnect spark plug cable during repairs or refueling operations.
3. Always start engine from side opposite discharge chute.
4. NEVER place hands or feet under mower or near discharge chute while engine is running.
5. Do not tilt mower at extreme angle while engine is running. Cut grass on hills and banks sideways, not up and down.
6. Always stop engine when not cutting grass.
7. Do not fill gas tank while engine is running. Do not spill gasoline on hot engine.
8. Keep children and pets away from area at all times during mowing operation. Never allow mower to discharge grass toward any person.
9. Do not attempt to start engine while mower is resting in high grass.
10. Check all nuts and bolts, particularly the blade bolts, for tightness. This is especially important during the initial operation period. Make this same check periodically thereafter.
11. While operating the mower, if any foreign object is struck, stop the mower and inspect for damage. Do not restart or operate the mower until all damage has been repaired.

**WARNING:** Should excessive vibration develop, check your blade and crankshaft immediately. Do not operate mower with an unbalanced blade, a damaged blade or a damaged crankshaft.

# 121-940



# PARTS LIST FOR ROTARY MOWER MODEL NO. 121-940

Ref. No.	Part No.	DESCRIPTION	Ref. No.	Part No.	DESCRIPTION
1	310-10029	Throttle Control Complete	42	710-442	Hex Hd. Cap Scw. 5/16-18x1-1/2" Lg.*
2	710-473	Truss Hd. Mach. Screw 10-24 x 1/2" Lg.*	43	712-123	Hex Nut 5/16-24 Thd. *†
3	305-7470	Knob - Throttle Control **	44	748-189	Blade Adapter †
4	310-8506	Throttle Control Bracket **	45	736-217	Spring Lock Washer 3/8 Screw Heavy Duty *†
5	711-128	Ferrule Assembly **	46	710-489	Hex Hd. Cap Scw. 3/8-24 x 1-1/2" Lg. Heat Treated †
6	732-141	Conduit and Wire **	47	710-117	Hex Hd. Cap Scw. 5/16-24 x 1" Lg. Heat Treated †
7	710-148	Hex Hd. Slotted Thd. Cut Scw. 8-32 x 3/8" Lg. *	48	901-10769	Blade Adapter Kit/Less Blade
8	438-10913	Drive Cover	49	312-7581	Blade 22"
9	-----	Engine	50	748-125	Sintered Bearing - Front
10	712-324	Elastic Stop Nut Thd. *	51	738-129	Axle Bolt - Front Only
11	736-300	Flat Washer	52	736-160	Flat Washer *
12	712-116	Elastic Locknut 3/8-24 Thd. *	53	310-10379	Link Assembly
13	310-10395	Clutch Rod	54	711-494	Spacer
14	732-184	Extension Spring	55	736-300	Flat Washer 3/8 Scw. *
15	438-10394	Link	56	710-107	Hex Centerlock Nut 1/4-20 Thd. *
16	714-365	Hi Pro Key *†	57	310-10459	Reinforcement Plate
17	438-10381	Engine Bracket Assembly	58	738-102	Axle Bolt - Rear Only
18	710-158	Hex Hd. Cap Scw. 5/16-24 x 1-1/4" Lg.*	59	501-9392	Rear Wheel - Complete
19	310-10377	Sprocket Assembly	60	310-8388	Handle Mount Bracket - R.H.
20	748-183	Bearing Support	61	714-507	Cotter Pin *
21	736-222	External Lock Washer 1/4" Scw. *	62	310-10430	Handle Stop Bracket
22	710-441	Hex Hd. Cap Scw. 1/4-28 x 1/2" Lg.*	63	715-110	Roll Pin 3/16-Dia. x 1-1/4" Lg. *
23	438-10370	Pivot Plate	64	310-9361	Lower Handle
24	711-110	Shoulder Bolt - Special	65	746-128	Cable Clip
25	713-135	Chain W/Master Link #48 x 26" Lg.	66	712-107	Hex Center Lock Nut 1/4-20 Thd. *
26	310-10378	Sprocket Assembly	67	710-106	Hex Hd. Cap Scw. 1/4-20 x 1-1/4" Lg. *
27	715-247	Roll Pin 3/16 Dia. x 1" Lg. *	68	310-9354	Upper Handle
28	748-227	Hex Bearing	69	710-256	Carriage Bolt 1/4-20 x 1-1/2" Lg. *
29	736-860	Flat Washer *	70	712-324	Elastic Stop Nut 1/4-20 Thd. *
30	716-106	"E"-Ring 5/8 Shaft	71	310-10474	Lockout Bracket
31	438-10372	Drive Support	72	712-526	Speed Nut
32	310-2265	Sleeve	73	305-7071	Grip - Black
33	305-10914	Drive Pinion	74	438-7859	Handle Panel
34	716-106	"E"-Ring 5/8 Shaft	75	310-8169	Lock Out Lever Assembly
35	748-227	Hex Bearing	76	305-8132	Ball - Knob
36	711-435	Shaft	77	711-440	Lockout Rod
37	310-8389	Handle Mount Bracket - L.H.	78	712-287	Hex Nut 1/4-20 Thd. *
38	732-181	Extension Spring	79	736-222	External Lock Washer 1/4 Scw. *
39	503-9392	Front Wheel Complete	80	305-7006	Fortiflex Bearing - Rear
40	438-10917	Deck Assembly			
41	736-119	Spring Lock Washer 5/16 Scw. *†			

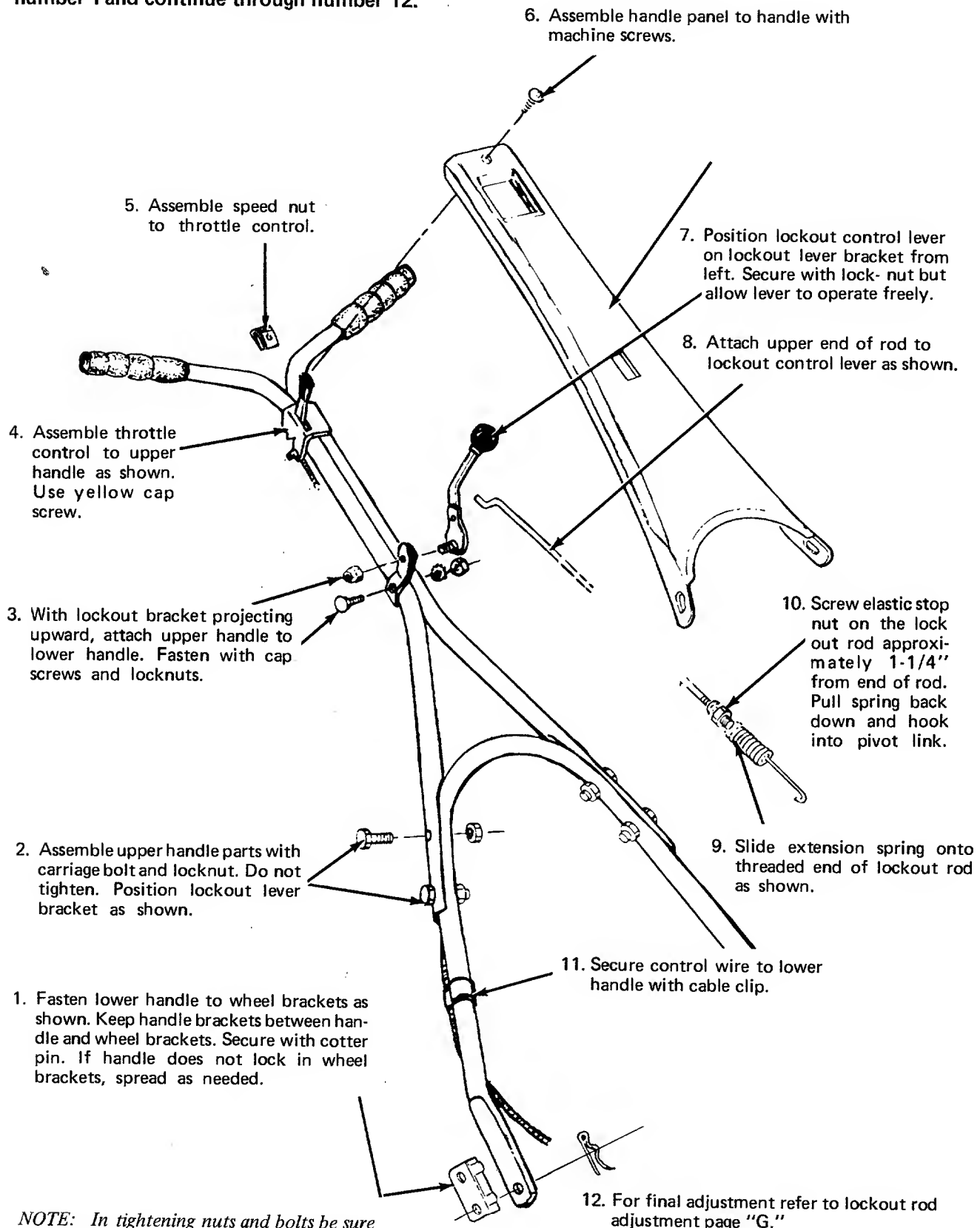
\* For faster service, purchase nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and description.

† Blade Adapter Kit/Less Blade 901-10769.

\*\* Part of Throttle Control (Complete) 310-10029.

## ASSEMBLY INSTRUCTIONS

**NOTE:** Follow instructions starting with number 1 and continue through number 12.



**NOTE:** In tightening nuts and bolts be sure that those which secure lockout control lever to lockout control lever bracket allows free movement of each of these items.

**FIGURE 1**

**NOTE:** This instruction manual covers various models and all accessories shown do not necessarily apply to your model mower.

If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines - Gasoline."

Find It Fast  
In The  
"Yellow Pages"

This mower should be broken in following the procedure described in the break-in instructions. The added effort here will double the service life of the unit. Particular attention should be paid to the notes on alignment.

When operating this mower, unnecessary or excessive engaging of the drive pinions with the wheels should be avoided. This is achieved by minimizing the raising and lowering of the handle during the mowing operation. Failure to observe this operating rule can reduce the service life of the front tires and drive pinions substantially. When engaging the self-propelled mechanism, a slight forward push on the mower as the drive pinions and the gear tread tires mesh will add to smoother and quieter operation. In addition to a smoother operation, it will add substantially to the service life of both the tires and the drive pinions.

### HANDLE ASSEMBLY PRECAUTIONS

Although the handle is of a simple design, difficulty has been encountered in its assembly. Certain precautions concerning its assembly must be heeded. The handle must be assembled as shown in the diagram. Trouble arises when certain parts are put together improperly.

- A. Lockout control lever must be mounted as shown in the illustration.
- B. The lockout control lever bracket must be mounted with the projection upward as shown in the illustration.
- C. If lower handle is too narrow to lock into handle bracket, spread as needed.

### BREAK-IN INSTRUCTIONS

1. Before starting the engine, lubricate all the bronze bearings on the drive shaft. The same oil which is used for the engine may be used for this.

Check the lockout control for proper operation. See **HANDLE ASSEMBLY PRECAUTIONS**.

Check drive assembly alignment. When the lockout control lever is moved to the Self-Propelled position (as shown in diagram), the black nylon drive pinions should mesh simultaneously with the gear tread tires. The lockout control lever should move from Self-Propelled position easily.

### OPERATION

1. Service engine with gas and oil. See Engine Manual packed with lawn mower for complete instructions for care and maintenance of engine. **READ DIRECTIONS CAREFULLY.**
2. Lubricate bronze bearings on drive shaft.
3. Check drive assembly for correct alignment (see break-in instructions.)
4. When ready to start engine, place lockout control lever into free wheeling position. This is done by snapping the lockout control lever back. Start engine in accordance with instructions in Engine Manual. After engine starts,

move throttle control lever on handle to the desired engine speed.

5. Lockout control lever may now be moved forward for self-propelled operation. When the lockout control lever is in the forward position, the drive pinions engage with the gear tread tires and forward drive results.
6. Temporary free wheeling is achieved by depressing the handle and raising front wheels slightly off the ground. Self-propelled drive is resumed when handle is released. Engine is stopped by placing control lever on handle into "Stop" position.

### LUBRICATION

**IMPORTANT:** Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn mower.

**WHEELS** - The bearing on the rear wheels of your lawn mower are made of Lifetime Fortiflex. No lubrication is required. Lubricate front wheel bearing as needed.

**THROTTLE** - Periodically lubricate throttle control lever and throttle wire assembly with a few drops of light oil (S.A.E. No. 10 or 20) for ease of operations.

**BRONZE BEARINGS** - Periodically lubricate all bronze bearings with a few drops of light oil (S.A.E. No. 10 or 20) to minimize friction.

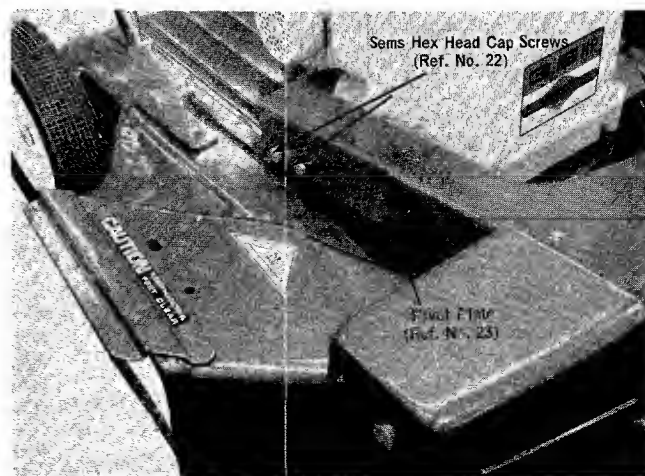
**ENGINE** - Follow Engine Manual for lubrication instructions.

### ADJUSTMENTS

**CAUTION:** Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

#### CHAIN ADJUSTMENT

1. Loosen (do not remove) two hex head cap screws. (See illustration below.)
2. Pull pivot plate forward.
3. Tighten cap screws and check chain tension. Repeat adjustment if necessary.



**STANDARD CUTTING HEIGHT** — Adjustment may be made by removing and moving wheel studs to desired position. Cutting heights will be raised as wheel studs are moved to a lower hole and lowered as wheel studs are moved to a higher hole in the deck. All wheel studs must be mounted in a relative position to the deck.

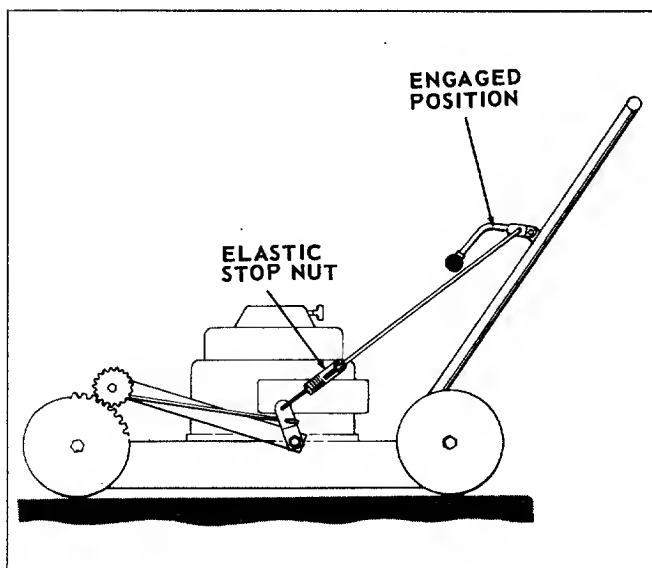
**OPTIONAL CUTTING HEIGHT** — An adjusting plate and thumb lever at each wheel position provides cutting height adjustment. Each adjusting plate has five holes. Height of cut will be changed when the thumb lever is moved from one hole to another. Simply depress thumb lever towards wheel and move wheel and lever assembly to desired position. All wheels must be positioned in relative height of cut positions.

**THROTTLE** — If adjustment becomes necessary, the throttle control wire assembly can be reset as follows.

1. Loosen, but do not remove, screw securing throttle control wire assembly at engine.
2. Move throttle control lever on handle to "Fast" position.
3. Move lever, to which control wire is fastened at engine, to full open position and retighten screw to secure throttle control wire assembly.

### LOCKOUT ROD ADJUSTMENT

1. Engage lockout control lever. (See illus. below.) All tension should be released from spring.
2. If tension still remains on spring, disconnect spring from pivot link, slide spring up the lockout rod and back elastic stopnut off one turn.
3. Reassemble tension spring and again check to be sure spring is free from tension. Repeat step 3 until the correct condition is obtained.



## MAINTENANCE

**CUTTING BLADE** — The blade may easily be removed for grinding or replacement as follows:

1. Remove bolt and lockwasher holding blade and hub assembly to engine crankshaft.
2. Remove blade and hub assembly from engine crankshaft.
3. Remove two bolts, lockwashers and nuts holding blade to blade hub.

When sharpening blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the mower.

Upon reassembly, make certain all parts are assembled properly and tightened securely.

**DECK** — The underside of mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite corrosion and cause an uneven discharge of grass clippings at the next cutting.

The deck may be cleaned by tilting the mower forward or on its left side and scraping clean with a suitable tool or by washing with a stream of water from a garden hose.

**CAUTION:** Do not direct the stream of water at a hot engine as damage to the engine may result.

**STORAGE** — The following steps should be taken to prepare lawn mower for storage.

1. Clean and lubricate mower thoroughly as described in the preceding instructions.
2. Refer to engine manual for correct engine storage instructions.
3. Coat mower's cutting blade with chassis grease to prevent rusting.
4. Place blocks under deck to raise tires clear of floor.
5. Store mower in a dry, clean area.

## USING YOUR ROTARY MOWER

For best results do not cut wet grass because it tends to stick to the underside of the mower thus preventing proper discharge of grass clippings. If wet grass must be cut, reduce engine speed and walking speed to help distribute the clippings more effectively.

New grass should be treated as wet grass, otherwise a normal walking speed is about the right pace for efficient mowing.

The best mowing pattern is one that allows the clippings to discharge towards the uncut part of the lawn. This permits recutting of the clippings to further pulverize them. When cutting high weeds, discharge towards cut portion then recut at right angles to first direction.

Lawn should be cut in the fall as long as there is growth.

**CAUTION:** If front wheels are removed from mower, reassembly must be made as follows:

1. Wheel pivot bar must be positioned with the notch to the front and the heavier side facing downward. (See figure A.)

2. Sems hex head cap screws must be assembled through mounting holes one and three of index plate.
3. After sems hex head cap screws are assembled through index plate mounting holes, fasten into holes two and four in deck. (See figure A.) This applies to both left and right sides of mower.

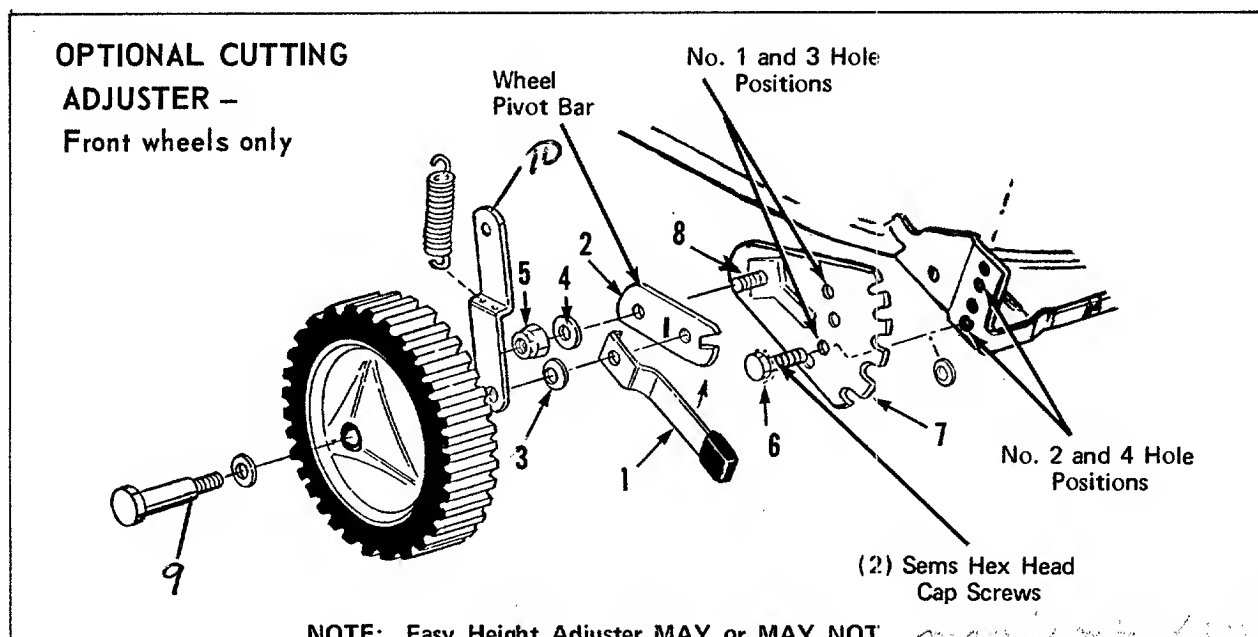


FIGURE A

Illus. No.	Part No.	DESCRIPTION
1	310-10530	Spring Lever Assembly w/Knob
2	310-10375	Wheel Pivot Bar
3	736-105	Belleville Washer
4	736-300	Flat Washer 3/8 Screw
5	712-116	Elastic Locknut 3/8-24 Thread
6	710-209	Sems Hex Head Cap Scw. 3/8-16 x 5/8" LG.
7	310-10376	Index Plate – R.H.
8	710-362	Hex Bolt – Special

9-711-430 AXLE BOLT  
10-310-10918 LINK ASSY

## LOCKOUT ROD ADJUSTMENT

1. Place front wheel height adjusters in the lowest cutting position. (See figure B.)
2. Engage lockout control lever. (See figure B.) All tension should be released from spring.
3. If tension still remains on spring, disconnect spring from pivot link, slide spring up the lockout rod and back elastic stopnut off one turn.
4. Reassemble tension spring and again check to be sure spring is free from tension. Repeat step 3 until the correct condition is obtained.

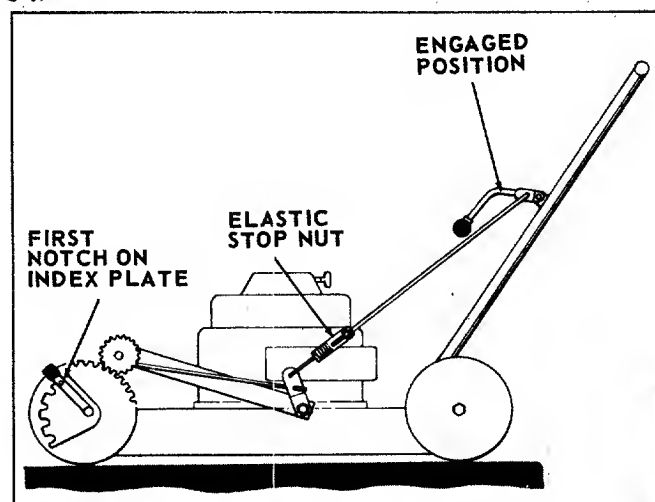
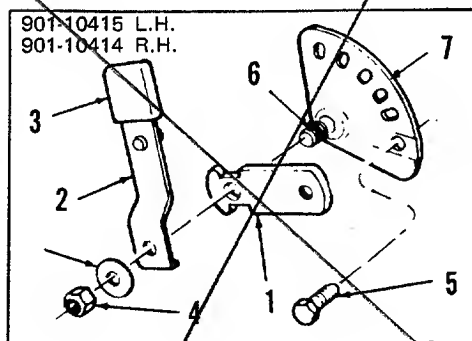


FIGURE B

(See next page for OPTIONAL CUTTING HEIGHT ADJUSTER, rear wheels only.)

**OPTIONAL CUTTING HEIGHT ADJUSTER  
REAR WHEELS ONLY.**



**NOTE:** Easy Height Adjuster MAY or MAY NOT be used on your unit.

Illus. No.	Part No.	DESCRIPTION
	310-7492	Wheel Pivot Bar
	310-8313	Spring Lever Assembly
	305-7520	Red Knobs
	712-214	GRIPCO Locknut 3/8-24 Thread
	710-209	Sems Hex Head Cop Screw 3/8-16 x 5/8 Long
	710-362	Hex Bolt Special
	738-102	Axle Bolt
	310-10408	Index Plate R. H.
	310-10409	Index Plate L. H.